

GILA RIVER BASIN

09468500 SAN CARLOS RIVER NEAR PERIDOT, AZ

LOCATION--Lat 33° 17'47", long 110° 27'03", in SE¼ sec. 36, T.1 S., R.18 E. (unsurveyed), Gila County, Hydrologic Unit 15040007, in San Carlos Indian Reservation, on U.S. Highway 70 bridge, 0.9 mi south of Peridot.

DRAINAGE AREA--1,026 mi².

PERIOD OF RECORD--Aug. 1910 to Jan. 1911 (gage heights only), Apr. 1914 to July 1915, Aug. to Sept. 1915 (monthly discharge only), Oct. 1929 to current year. Prior to Oct. 1929 published as "at San Carlos."

REVISED RECORDS--WSP 1283: Drainage area.

GAGE--Water-stage recorder. Datum of gage is 2,542.29 ft above sea level (AZ Highway Department benchmark). See WSP 1713 or 1733 for history of changes prior to Feb. 1, 1942. Feb. 1, 1942, to Aug. 13, 1970, at sites 1.9 mi upstream at different datums. Aug 14, 1970, to Sept. 30, 1980, at site 1.8 mi upstream at datum 2,578.90 ft, above sea level. Supplementary water-stage recorder Dec. 21, 1967, to July 2, 1968, at site 2.2 mi downstream at datum in use prior to Feb. 1, 1942; Jan. 31, 1979, to Sept. 30, 1980, at present site and datum.

REMARKS--Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 600 acres. Small inflow from sewage treatment system about 3.6 mi upstream. Flow regulated to some extent since June 15, 1979, by Talkalai Reservoir; capacity, about 6,000 acre-ft.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 54,800 ft³/s Jan. 8, 1993, gage height, 12.12 ft, from rating curve extended above 23,000 ft³/s on basis of rate of change in storage in San Carlos Reservoir; maximum gage height 14.8 ft, Dec. 22, 1965, site and datum then in use; no flow at times in most years.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 2,200 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 7	0100	*200	5.97

Minimum daily discharge, no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	4.4	8.5	15	13	15	14	4.6	0.00	0.00	3.1	0.00
2	0.00	6.1	8.7	14	13	14	13	4.3	0.00	0.00	2.1	0.00
3	0.00	6.6	9.0	12	13	14	13	4.0	0.00	0.00	0.80	0.00
4	0.00	6.8	8.7	12	13	13	12	3.7	0.00	0.00	0.00	0.00
5	0.00	8.1	9.6	14	13	12	12	3.6	0.00	0.00	0.00	0.00
6	0.00	8.5	10	12	12	12	13	3.4	0.00	0.00	15	0.00
7	0.00	8.0	11	12	12	12	14	3.0	0.00	0.00	137	0.00
8	0.00	7.9	10	12	13	13	15	2.5	0.00	0.00	40	0.00
9	1.6	8.2	10	12	13	15	14	2.0	0.00	0.00	14	0.00
10	4.7	7.9	11	12	13	16	13	1.6	0.00	0.00	7.3	0.00
11	4.1	5.9	11	12	13	16	13	1.1	0.00	0.00	4.2	0.00
12	3.2	5.5	11	12	13	15	12	0.74	0.00	0.00	2.7	0.00
13	1.8	6.4	13	12	14	15	13	0.28	0.00	0.00	1.4	0.00
14	0.13	6.7	15	12	15	14	12	0.00	0.00	0.00	0.69	0.00
15	0.00	6.3	15	12	14	14	11	0.53	0.00	0.00	0.08	0.00
16	0.00	6.5	16	13	15	13	11	0.16	0.00	0.00	0.00	0.00
17	0.00	6.8	16	13	16	13	9.4	0.00	0.00	0.00	0.00	0.00
18	0.00	7.1	15	13	15	13	8.9	0.00	0.00	0.00	0.00	0.00
19	0.00	7.0	13	13	16	13	8.3	0.00	0.00	25	0.00	0.00
20	0.00	7.0	12	13	16	13	7.9	0.00	0.00	0.03	0.00	0.00
21	0.00	7.3	e12	12	16	13	7.7	0.00	0.00	0.00	0.00	0.00
22	0.00	7.2	e12	12	15	14	7.8	0.00	0.00	0.00	0.00	0.00
23	0.00	6.8	e12	12	15	13	7.5	0.00	0.00	0.00	0.00	0.00
24	0.00	6.1	e13	12	15	12	7.5	0.00	0.00	0.00	0.00	0.00
25	0.00	6.2	e13	11	15	13	6.9	0.00	0.00	0.00	0.00	0.00
26	0.00	7.2	e13	12	15	12	6.2	0.00	0.00	0.00	0.00	0.00
27	0.07	7.7	e14	12	15	13	6.4	0.00	0.00	0.00	0.00	0.00
28	0.95	7.7	e14	13	15	13	6.0	0.00	0.00	0.00	0.00	0.00
29	2.1	8.1	13	13	---	15	5.6	0.00	0.00	0.00	0.00	0.00
30	1.3	8.4	14	13	---	13	5.3	0.00	0.00	0.23	0.00	0.00
31	2.5	---	15	14	---	14	---	0.00	---	2.6	0.00	---
TOTAL	22.45	210.4	378.5	388	396	420	306.4	35.51	0.00	27.86	228.37	0.00
MEAN	0.724	7.013	12.21	12.52	14.14	13.55	10.21	1.145	0.000	0.899	7.367	0.000
MAX	4.7	8.5	16	15	16	16	15	4.6	0.00	25	137	0.00
MIN	0.00	4.4	8.5	11	12	12	5.3	0.00	0.00	0.00	0.00	0.00
AC-FT	45	417	751	770	785	833	608	70	0.00	55	453	0.00
CFSM	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00
IN.	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.00	0.01	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2002, BY WATER YEAR (WY)

	MEAN	28.70	20.06	103.1	140.2	162.9	141.3	23.94	7.739	3.600	18.18	51.63	23.26
MAX	519	178	1581	3208	1500	1262	170	41.8	19.8	84.6	320	166	
(WY)	1973	1979	1966	1993	1980	1941	1941	1980	1993	1930	1990	1983	
MIN	0.20	2.68	5.07	5.80	7.03	4.83	2.17	0.029	0.000	0.000	1.61	0.000	
(WY)	1957	1957	1951	1958	1953	1959	1959	1959	1948	1947	1962	1956	

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1930 - 2002

ANNUAL TOTAL	3695.96	2413.49	
ANNUAL MEAN	10.13	6.612	60.08
HIGHEST ANNUAL MEAN			426
LOWEST ANNUAL MEAN			6.61
HIGHEST DAILY MEAN	167	137	20000
LOWEST DAILY MEAN	0.00	0.00	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	0.00
ANNUAL RUNOFF (AC-FT)	7330	4790	43520
ANNUAL RUNOFF (CFSM)	0.010	0.006	0.059
ANNUAL RUNOFF (INCHES)	0.13	0.09	0.80
10 PERCENT EXCEEDS	24	14	65
50 PERCENT EXCEEDS	4.4	5.9	9.8
90 PERCENT EXCEEDS	0.00	0.00	1.0

e Estimated